# ARCHITECTURAL CERAMICS IN THE 21st CENTURY:

# Design and Preservation of Contemporary & Historic Architecture

March 22-24, 2014

Cambridge, Massachusetts

An intensive 2-day conference exploring the use, performance, maintenance, and preservation/restoration of

- hollow clay tiles terra cotta tiles, cladding, & rainscreens
  - porcelain tiles & cladding other architectural ceramics in new and existing buildings and monuments

Plus 1-day Tour Program focusing on structures using Guastavino tiles or ceramic cladding

#### Organized by:

- · Technology & Conservation
- · MIT Department of Architecture-Building Technology Program
- · Historic Resources Committee, Boston Society of Architects/AIA

for

- architects engineers architectural conservators building restoration specialists
- construction specifiers campus planners contractors building maintenance supervisors
  - objects conservators construction managers/supervisors real estate developers
- operations/facilities managers & administrators of libraries, museums, & other cultural institutions; educational & commercial complexes; religious properties federal, state, and local government officials responsible for the care, rehab, and/or continued viability of buildings
  - manufacturers, fabricators, and suppliers of relevant components and systems

### **SCHEDULE**

#### **ARCHITECTURAL CERAMICS IN THE 21st CENTURY:**

## Design and Preservation of Contemporary & Historic Architecture

	, Mai Cii ZZ, ZO14			
7:30-8:15 am	Check-in			
8:15-8:20	Welcome – Susan E. Schur, Hon. AIA, FAPT, Publisher Editor, Technology & Conservation, and Prof. John A. Ochsendorf, Massachusetts Institute			
	of Technology			
8:20-9:05	Architectural Perspectives: Historic Uses and Styles – Tony Herbert, Honoary Research Fellow, University of Birmingham, Ironbridge International			
	Institute for Cultural Heritage, & Past President of Tile & Architectural Ceramics Society			
9:05-9:55	Conservation Perspectives – An Overview from Historic to Current Times – John Fidler, RIBA, FIIC, FAPT, FSA, President, John Fidler Preservation			
	Technology, Inc.			
9:55-10:05	The Evolution and Regression of Clay Roofing Tile Forms – Matthew B. Bronski, PE, Associate Principal, Simpson Gumpertz & Heger			
10:05-10:20	Posters + Coffee Break			
	n Materials, Technology, and Care			
10:20-10:50	Mechanical and Structural Properties of Architectural Ceramics – Prof. Katherine T. Faber, Material Science & Engineering Dept., Northwestern			
	University, & Co-Director-Art Institute of Chicago's Center for Scientific Studies in the Arts			
10:50-11:20	Chemical Properties and Weathering – Prof. Denis Brosnan, PE, Clemson University			
11:20-11:35	Performance & Aesthetics of Modern Terra Cotta Rainscreen Facades & Sunscreens – Moshe Steinmetz, President, Shildan Inc.			
11:35-11:50	Architectural Porcelain Enamel – Cullen L. Hackler, Executive Vice President, Porcelain Enamel Institute			
11:50 - 12:05	Q&A			
12:05-2:05	Luncheon at MIT- SAP's Maki Building			
2:05-2:35	Ceramic Innovation in the Work of the Guastavino Family – Prof. John A. Ochsendorf, Massachusetts Institute of Technology			
2:35-3:00	Developments in Cleaning and Care – Prof. Frank G. Matero, University of Pennsylvania; Acting Chair - Historic Preservation			
3:00-3:20	Evaluating Existing Architectural Ceramics: Field and Laboratory Techniques – Susan L. Knack-Brown, PE, Principal, Simpson Gumpertz & Heger			
3:20-3:40	Posters+ Coffee Break			
Conservation/Pr	reservation of Buildings/Building Types of the 19th & 20th Centuries - Case Histories			
3:40-4:10	Architectural and Structural Ceramics: From the Gothic to the Modern - Structural Investigations and Solutions - Edmund P. Meade, PE, FAPT,			
	Principal & Director of Preservation, Robert Silman Associates			
4:10-4:25	Tile Roof Renovation/Restoration of a Newport Mansion - Curt Genga, Director of Properties, Preservation Society of Newport County, and Carl			
	Rothbart, Associate Partner for Preservation, WASA/Studio A			
4:25-4:45	Moravian Tile Projects – Adam Zayas, Head Ceramist, Moravian Pottery & Tile Works			
4:45-5:00	Ceramic Panels for Ambitious Designs and Long-Life Cycles – Gerhard Plank, Agrob Buchtal, Deutsche Steinzeug Cremer & Breuer AG			
5:00-5:15	One Eagle Place, Piccadilly, London – Eric Parry, Principal, Eric Parry Architects			
5:15-5:45	Ceramics Usage in Historic Islamic Structures – Prof. Renata Holod, University of Pennsylvania			
5:45-6:00	Girih Tiles in Medieval Islamic Architecture – Peter J. Lu, Research Associate, Harvard University			
6:00-6:15	Overview of European Ceramics Research & Fabrication Developments – Dr. Giorgio Timellini, Director, Italian Ceramics Center, Bologna, and			
	Professor, University of Bologna, Dept. of Civil, Chemical, Environmental & Materials Engineering			
6:15-6:30	Q&A			
6:30-8:00	Reception - Cambridge Marriott Hotel			
CHNDVA W	arch 23, 2014			
7:30-8:00 am	Film presentations on mosaic conservation, tile manufacturing, and traditional tile craftsmanship - the Metropolitan Museum's Moroccan court			
	es and Innovations in Design			
8:00-8:30	A Timeless Modern Material – Ceramics and Building Today – David Fixler, FAIA, LEED BD&C AP, Principal, Design & Preservation, EYP/AE Inc.			
8:30-8:45 8:45-9:25	New Types of Tiles – Eric Astrachan, Executive Director, Tile Council of North America, Inc.			
	New Applications for the Most Ancient of Materials – Eoin Billings, Director and Founding Partner, Billings Jackson Design			
9:25-10:25	Sustainability, Standards, and Usage Implications of New/Improved Materials - from Manufacturers & Installers Viewpoints – A. Tad Colbert, CEO,			
	Ludowici Roof Tile Inc; John Krouse, President, Boston Valley Terra Cotta; David Dare, Managing Director, Shaws of Darwen Ltd.; and Bill			
	Griese, LEED AP, Standards Development & Green Initiative Manager, Tile Council of North America, Inc.; Dr. Giorgio Timellini, Director, Italian			
10.25.10.40	Ceramics Center, Bologna, and Professor, University of Bologna, Dept. of Civil, Chemical, Environmental & Materials Engineering			
10:25-10:40	Posters + Coffee Break			
10:40-11:00	Setting Systems – Peter McKeon, Laticrete International Inc.			
11:00-11:25	Digital Material Systems – Prof. Martin Bechthold, Harvard University Graduate School of Design, and Director of GSD's Technology Platform			
11:25-11:40	Custom Fabrication – Ted Acworth, CEO and Founder, Artaic - Mosaic Innovations			
11:40-11:00	Use of Color - Glazing and Integral – Matthew S. Galvez, President & CEO, Elgin Butler Co.			
12:00-12:10	Q&A			
12:10-2:05	Luncheon at MIT-SAP's Maki Building			

#### Bringing Architectural Ceramics into 21st Century Architectural Design & Ornamentation

2:05-2:25	Use of Terra Cotta and Tiling in Cladding of Buildings in Different Contexts – Jonathan Sakula, FIStructE, FICE, Technical Director, Buro Happold
2:25-3:00	The Face of the London Underground: 150 Years of Ceramics and Faience – Mike Ashworth, Design and Heritage Manager, London Underground
3:00-3:20	New Types of Cladding – Giorgio Valentini, President, Atlantic Link
3:20-3:40	New Bond Street Dual Entrance/Facade – Eric Parry, Principal, Eric Parry Architects

3:20-3:40 New Bond Street Dual Entrance/Facade – Eric Parry, Principal, Eric Parry Architects

3:40-4:00 Posters + Coffee Break

4:00-4:20 Terra Cotta Restoration Procedures for Modern Urban Structures vs. Those for Historic Buildings, *Diane S. Kaese, RA, Kaese & Lynch* 

Architecture and Engineering, LLP

4:20-4:40 Contextual Ceramic Facades: Connecting the Past and Present – *Nat Crosby, Sr. Project Manager, and Jason Forney, Sr. Associate, Bruner Cott* 

& Associates

4:40-4:55 A China Gradient: The Austrian Pavilion at Expo 2010 – Sandra Manninger, Principal, del Campo Manninger Architects

4:55-5:10 The Terra Cotta-Covered Museum: Amplifying Architecture as Sculpture – John Boyer, President and CEO, The Bechtler Museum of Modern Art

5:10-5:40 Summation and Challenges Presented – John Fidler, RIBA, FIIC, FAPT, FSA, President, John Fidler Preservation Technology, Inc.

5:40-6:00 O&A

#### MONDAY, March 24, 2014 Optional Program (8:00am-2:00pm)

The program will focus on structures with cladding, tiles, and/or ornamentation of terra cotta or other architectural ceramics. This will include with a bus tour to view buildings in Cambridge and Boston and visits to an advanced ceramic fabrication facility and to the Boston Public Library where several different styles of Guastavino tile work will be seen and where short talks on the BPL's tile work will be given by William Barry, Heritage Planning and Design, and by Prof. John A. Ochsendorf, MIT.

## **CONFERENCE SESSIONS**

The conference venues will be on the MIT campus in Cambridge, Massachusetts.

The Wong Auditorium where the conference sessions will be held is easily reached by public transportation. (There is very limited parking available near this site.) Continuing education credits will be available for attendees for the conference sessions on March 22 and March 23 and for the optional program on March 24.

## **HOTEL INFORMATION**

Hotel accommodations are attendees'responsibility.

However, a block of rooms have been reserved at the nearby Cambridge Marriott Hotel at the special rate of \$169 (plus tax) per night (single or double room). Rate is valid until March 7, 2014.

Group booking code for website bookings is: tcctcca.

The direct link is:

http://www.marriott.com/hotels/travel/boscb-boston-marriott-cambridge/?toDate=3/25/14&groupCode=tcctcca&stop\_mobi=yes&fromDate=3/21/14&app=resvlink

If booking through Central Reservations (1-888-236-2427), give them the group booking code which is: tcctcca.

## **CALL FOR POSTERS**

The focus of the conference will be on the use of architectural ceramics in the facades and structures of historic and modern buildings and other components of the built environment. Attention also will be given to the decorative/artistic utilization of ceramics on the exterior of buildings/monuments. . . . Many advances in the manufacture and use of terra cotta and porcelain tiles, cladding, rainscreens, and solar screens have occurred during recent years, and these exciting research and implementation activities are continuing. The conference will explore various aspects of recent ceramic performance, life cycle, and sustainability studies, fabrication developments, design improvements, and new products, as well as construction techniques/pitfalls, and current conservation/ preservation methods. In addition, several case histories will be presented detailing viable, cost-effective approaches to the design and care of architecture and decorative arts that incorporate ceramics, as well as innovative usages of ceramics in structures and building elements.

Poster presentations on a project or research involving performance, detailing, specification, use, care, or repair of terra cotta and/or porcelain tile/cladding or hollow clay tile are welcomed.

A poster presentation is one 30" x 40" board or two 20" x 30" boards showing project and/or research information relevant to the conference subject matter – exteriors of contemporary and/or historic/traditional buildings/structures utilizing ceramics as a major element of their design or as decorative feature(s). An area will be set aside during the conference for the display of posters and discussion.

Poster proposals should be submitted by February 15, 2014 to:

Technology & Conservation, 76 Highland Avenue, Somerville, MA 02143; e-mail: ses\_tec\_con@msn.com

#### **QUESTIONS?**

If you have any questions, please contact Susan E. Schur, Hon. AIA, FAPT, at Technology & Conservation, Tel: 617-623-4488. e-mail: ses\_tec\_con@msn.com

#### **REGISTRATION FORM**

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REGISTRATIO	N FEE:		<u>Amount</u>
\$550/persoi	n		\$
Basic fee covers: • the 8:00am-6:00 • the March 22 and • the Saturday ever	pm conference pro d March 23 lunched	,	n., March 23, 2014
		ty or dietary needs:	other needs
Guest tickets for the	e March 22 recepti	on can be purchased @ \$50	/ticket \$
	nd the Guastavino	24 – no charge for persons registile and terra cotta cladding	
		TOT	<b>AL</b> \$
	tickets for the Ma	arch 22, reception) is enclos	U. S. A. bank) for registration fee sed. <i>Make check or money order</i>
Please register me (us)	for the conference:		
Name(s)			
Title			
Organization			
Address			
City, State, Zip (Postal Code)			
Tel:	Fax:	e-mail	
individuals in the 2014 "Architectur tour, and other arrangements in co conference organizers, and cooper	ne participation of Technology & C ral Ceramics in the 21st Century" co nnection with this Conference are rating organizations and individual:	Conservation, The Technology Organization, Inc., onference is limited to providing educational backge under the exclusive control of others and that Tec Is have no liability or responsibility whatsoever for	conference organizers, and cooperating organizations and round and guidance; that all transportation, accommodations, hnology & Conservation, The Technology Organization, Inc., he death of any person or for any loss, expense, delay, injury, ramics in the 21st Century" conference and the information
Signature(s)			Date

Return this form, with check or money order (made payable to The Technology Organization, Inc.), to: Technology & Conservation, 76 Highland Avenue, Somerville, MA 02143 U.S.A.